

CARMELIET, Peter
Appl. No. 10/578,485
Atty. Ref.: 4465-10
Amendment After Final Rejection
Monday, November 24, 2008

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows.

1. (Currently Amended) A transgenic Xenopus tadpole comprising a transgene that is a reporter gene specifically expressed in a functional lymphatic vessel system of said Xenopus tadpole and that visualizes said lymphatic vessel system, said lymphatic vessel system comprising lymphatic vessels, lymphatic sacs and a lymphatic heart.

Claim 2. (Canceled)

3. (Previously Presented) A method to produce a transgenic Xenopus tadpole according to claim 1 comprising introducing a vector comprising a transgene under control of a promoter specifically expressed in the lymphatic vascular system into cells of a Xenopus tadpole.

4. (Previously Presented) A method according to claim 3 wherein said promoter is selected from the list comprising a Podoplanin promoter, a Prox-1 promoter, a VEGFR-3 promoter and a LYVE-1 promoter.

5. (Previously Presented) A method for visualizing the lymphatic vessel system in a Xenopus tadpole comprising generating a transgenic Xenopus tadpole comprising a reporter gene that is specifically expressed in the lymphatic vessel system.

6. (Previously Presented) A method to identify a compound capable of modulating lymphatic vessel development in a transgenic Xenopus tadpole according to claim 1 comprising the steps:

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- a) contacting said transgenic Xenopus tadpole with a test compound,
- b) comparing the lymphatic vessel system in said transgenic Xenopus tadpole contacted with said test compound with the lymphatic vessel system of a transgenic Xenopus tadpole that was not contacted with said test compound and,
- c) determining the effect of said test compound on lymphatic vessel development, such that if lymphatic vessel development in the transgenic Xenopus contacted with said test compound is different from the lymphatic vessel development in the transgenic Xenopus tadpole that was not contacted with said test compound, said compound is a modulator of the lymphatic vessel system.